

FIG. 25 is a schematic diagram representation of one embodiment of the DAC portion shown in FIG. 20;

FIG. 26 is a schematic block diagram of another embodiment of the DAC stage of FIG. 2;

5 FIG. 27 is a schematic diagram of one embodiment of a portion of the DAC stage of FIG. 2 in combination with one embodiment of the switched capacitor filter stage of FIG. 2;

FIG. 28A is an illustration of a top view of one embodiment of a switched capacitor cell;

10 FIG. 28B is an illustration of a top view of another embodiment of a switched capacitor cell;

FIG. 29 is a representation of a top view of one embodiment of a die layout of a DAC portion having a plurality of SC cells;

FIG. 30 is a schematic diagram of one embodiment of the continuous time filter stage of FIG. 2;

15 ~~FIG. 29 shows a schematic diagram of another embodiment of the switched capacitor DAC of FIG. 4;~~

~~FIG. 30 shows schematic diagrams of one embodiment of the continuous time filter stage of FIG. 2; and~~

FIG. 31 is a block diagram of one embodiment of a squaring circuit;

20 ~~FIG. 32 is a block diagram of one embodiment of a squaring circuit;~~

~~FIGS. 33A-33C are block diagrams showing operation of one embodiment of the squaring circuit of FIG. 32;~~

~~FIGS. 34A-34C are block diagrams showing operation of one embodiment of the squaring circuit of FIG. 32; and~~

25 FIG. 35 is a block diagram of one embodiment of an analog to digital converter.

### Detailed Description

30 ~~FIG. 1 is a block diagram of one embodiment of a portion of a handset 50 for a mobile communication system. The handset 50 includes an input portion having a transducer 54 that receives an input signal 56, e.g., a voice or other acoustical signal, representing information to be communicated via the mobile communication system. The transducer 54 converts the input signal 56 into an electrical signal, typically an analog signal, which is supplied to an analog-to-digital converter (ADC) 58, for example a voiceband ADC. The~~